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DIVISION OF FORENSIC SCIENCE

DEPARTMENT OF JUSTICE

275 West Front Street, Missoula, MT 59802 (406) 728-4970

APRIL 1982

STATE DOCUMENTS COLLECTION

JUN 9 - 1983

REGIONAL SEMINARS

Death Investigation Seminars will be in Lewistown on March 29th and 30th and in Shelby April 1st and 2nd. John Pfaff, M.D., will lecture in Shelby and Ken Mueller, M.D., in Lewistown. Skeletal identification and facial reconstruction will be discussed by the University of Montana Anthropology Department. Ron Rivers, M.D., will review gunshot wounds.

QUESTIONED DOCUMENTS AND ATTORNEYS

The Attorney General and the Division of Forensic Science have given high priority to obtaining a Questioned Document Examiner for Montana. Outside experts have shot down many cases in this state, and it always costs thousands of dollars for a county to hire their own expert. Aside from examining alterations, obliterations and erasures of documents, their expertise covers typewriters, check writers, copiers and writing instruments. They can restore burned documents, plus date and analyze ink and paper.

An extra benefit included in the hiring of the Questioned Document Examiner is that, by necessity, they are expert photographers. They excel in infrared, oblique lighting and close-up photography. Their expertise can be put to good use in preparing photo exhibits which require enlargement or special techniques for courtroom presentation. This would benefit all the forensic scientists in our crime laboratory.

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1515 E. 6th AVE.
HELENA, MONTANA 59620

SHELBY
PERSONALS

APRIL 1982

ON CALL SCHEDULE - MONTANA STATE MEDICAL EXAMINER

275 W. Front Street
Missoula, Montana 59802

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				1	2	3 JOHN PFAFF
4 JOHN PFAFF	5	6	7	8	9	10 RON RIVERS
11 RON RIVERS	12	13	14	15	16	17 RON RIVERS
18 RON RIVERS	19	20	21	22	23	24 JOHN PFAFF
25 JOHN PFAFF	26	27	28	29	30	

Telephone Numbers: State Office - 728-4970
WATS Line - 243-5796

Home Phone: Dr. Ron Rivers- 728-2033 (Home)
(week nights call unless otherwise indicated)

Dr. John Pfaff - Great Falls
Hospital - 727-3333
Home - 727-3905

Dr. Ken Mueller- Billings
Hospital - 657-7000
Home - 248-3024

ANSWERS

1. Bacteria or germs in the gut and enzymes in body tissues produce a foul stench, bloating, and a green to black color to the body after death. A skinny white person may look dark, fat and have the eyes and tongue protruding from the face.

This terrible appearance, as well as the nauseating smell, often cause a hurried and superficial examination. Yet this type of corpse needs a more detailed and careful investigation than perhaps any other. The changes in appearance and destruction of wounds by decay, animal, and insects are a difficult challenge to the investigator, the medical examiner and the toxicologist. Mistakes are easily made, especially in haste. Yet the body has been undiscovered for longer than usual so a few extra days will make no difference.

2. A forensic dentist or odontologist can compare the teeth in the skull with dental records made while the individual was living. A forensic radiologist can compare X-rays of the dead body with X-rays made while the individual was living. Many positive identifications of unknown persons have been made by these methods.

Probable identifications have been made by estimating the age, sex, race and height from the skeleton by forensic anthropologists. Hair from the body can be compared with hair from a brush used by the person at home. Tissues or blood from the body can be typed to compare with any previous information. The toxicologist can determine the presence of medicines in the body fluids or tissues. A missing person taking insulin, digitalis, or dilantin might thus be suspected.

Finally, the pathologist will document any surgical procedures, congenital abnormalities, or diseases or old injuries the body may have. Tattoos may be hidden beneath the discolored skin. Often this skin is easily removed and a clear, vivid tattoo may be disclosed and photographed for a permanent record. All these may be useful in making an identification.

3. The most important procedure in any body with the possibility of an altered wound is to X-ray that area. I have been surprised a dozen times by the appearance of bullets or shotgun pellets in bodies unsuspected of having been murdered. A broken off knife blade or cuts in the rib bones can indicate a stabbing death.

"Phew!" The officer exclaimed as he observed the body at a remote campsite. "What's a big fat black man doing out here?" The swollen discolored corpse had bulging eyes and the mouth and nose were filled with maggots. "Lookit these eyes and the big neck. He must of died from some kind of goiter. I heard it can cause your eyes to pop out like that."

"Well, we ain't goin' to identify him anyway. There's no wallet and the animals have chewed his fingers off," stated the forest ranger. There were a few large gaping holes into the chest where large numbers of maggots were also seen. "Can't tell if those were wounds or not, but heck nobody is going to be able to tell anything about him. Lets get out of here and tell the funeral director to pick him up. He will want to cremate him right away so as not to stink up the funeral parlor. Can't blame him a bit, though, nobody wants to fool around with a thing like that. He must have been dead for months!"

QUESTIONS:

- 1) Why was the officer wrong in assuming the corpse was "a big fat black man with goiter"?
- 2) What other means of identification can be used in badly decomposed or skeletonized bodies?
- 3) If injuries have been altered by insects or animals what can a medical examiner do?
- 4) What can be done to help estimate the time of death?

ANSWERS (continued)

Since bruises can't be seen it is a must to examine the neck for broken bones and the skull for fractures. The bones of the hands may have been broken in a fight. All these X-rays will also be useful in identifying an individual.

4. Maggots go through three stages before hatching into flies. The collection of eggs and larvae for examination by an insect expert or entomologist may reveal how long they have been on the body. Fly eggs are deposited quickly after death depending on the abundance of the flies and the temperature.

Plants found under the body as compared to plants surrounding the body may also help estimate the time of death.

Other factors that may be useful are stomach contents and vitreous humour if present.

NOTE: There is a Nuisance Odor Mask #8713 available from 3M which can help in these situations. Some prefer to rub a strong ointment on their upper lip or moustache such as Noxzema.

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